

TRAP NO. 2 S.I.S.T. (ST. III)
DRAINAGE AREA: 1.3 AC.
STORAGE REQUIRED: 18,180 G.
STORAGE PROVIDED: 50,400 G.
DEPTH: 5.0 FT.
THREAT ELEVATION: 582.0
CLEANOUT ELEVATION: 580.5
BOTTOM ELEVATION: 579.0
BOTTOM DIMENSIONS: 7' x 15'
2:1 SIDE SLOPES

TRAP NO. 1 S.O.S.T. (ST. I)
DRAINAGE AREA: 4.4 AC.
STORAGE REQUIRED: 2,418 G.
STORAGE PROVIDED: 8,160 G.
DEPTH: 4.0 FT.
TOP OF STONE WEIR: 575.0
CLEANOUT ELEVATION: 569.0
BOTTOM ELEVATION: 567.0
BOTTOM DIMENSIONS: Varies - SEE PLAN
2:1 SIDE SLOPES
L=18'

PARCEL 12
TOWN CENTER
SECTION 3 AREA 2
P.B. 12 F.60
ZONED: N.T.

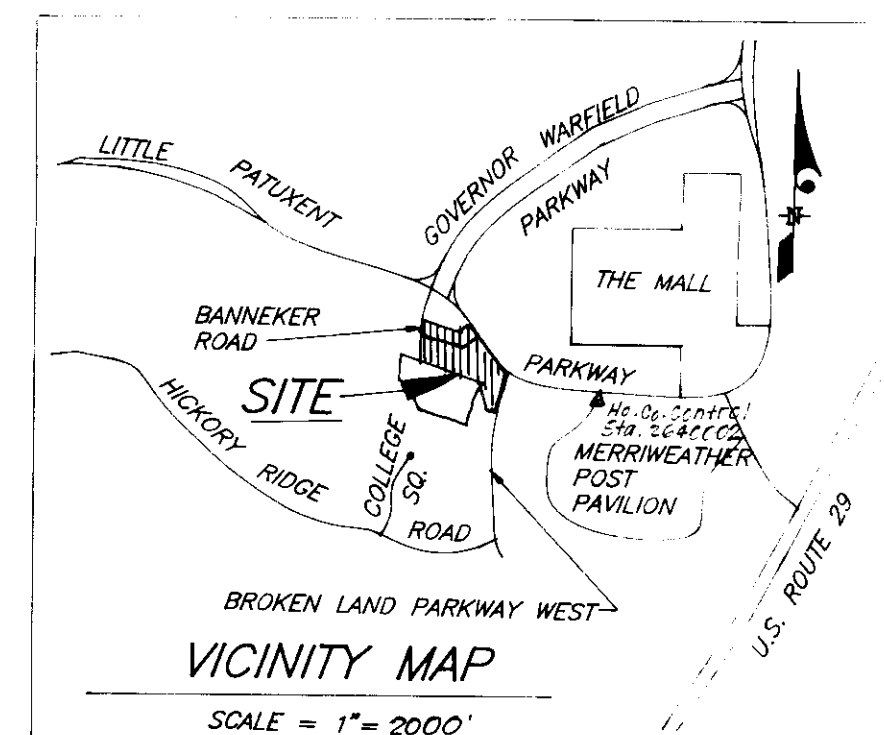
NOTE: REMOVE EX. HEADWALL
BUILD M-3 OVER CONN. EX.
18" RCP. SEE PROFILE SHT. 2

SEE SHEET 2 FOR
ADDITIONAL DETAIL
AT ENTRANCE.

TOWN CENTER
SECTION 3 AREA 2
PARCEL 7A
P.B. 15 F.85
(132.2 AC)

LEGEND

- CONTOUR INTERVAL
EXISTING CONTOUR
PROPOSED CONTOUR
DIRECTION OF DRAINAGE
WALK OUT BASEMENT
- EXISTING SEWER MAIN
EXISTING WATER MAIN
EXISTING STORM DRAIN
EXISTING TREES TO REMAIN
- STABILIZED CONSTRUCTION
ENTRANCE
- LIMIT OF DISTURBED AREA
- EARTH DIKE
- TREE PROTECTION FENCE
- CHAIN LINK FENCE
- EX. TELEPHONE CABLE
- EX. ELECTRIC CABLE
- EX. GAS LINE
- EX. PAVING TO REMAIN



SITE ANALYSIS

TOTAL AREA OF THE SITE: 8,868.40 TOTAL
ZONING: N.T.
RECORDING REFERENCE: P.B. 15 F.85; P.B. 30 F.17
463/196
SEE GENERAL NOTES SHEET 2
STORM WATER MANAGEMENT IS PROVIDED PER F-85-131.

PLANT LIST

SYM	PLANT NAME	QUANTITY	SIZE
Q	QUERCUS PALUSTRIS 'PIN OAK'	10	2 1/2" CAL. 8' H.
P	PINUS STROBIS 'WHITE PINE'	17	8-10' H. 8" DB
P	PINUS STROBIS 'WHITE PINE'	21	6-8' H. 8" DB

Reviewed for: HOWARD S.C.D.
Name: [Signature]
Signature: [Signature]
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I certify that all development and construction will be done according
to this plan of development and plan for sediment and erosion control and
that all responsible personnel involved in the construction project will have
a Certificate of Attendance at a Department of the Environment Approved
Training Program for the Control of Sediment and Erosion before beginning
the project. I also authorize periodic on-site inspection by the Howard
Soil Conservation District or their authorized agents, as are deemed
necessary."

Signature: [Signature] Date: 10-2-92

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment
and Erosion Control represents a practical and workable
plan based on my personal knowledge of the site
conditions and that it was prepared in accordance
with the requirements of the Howard Soil Conservation
District.

Signature: [Signature] Date: 9-28-92

SHEET INDEX

SHEETS 1 & 2 SITE DEVELOPMENT & SEDIMENT CONTROL PLAN
SHEET 3 SEDIMENT & EROSION CONTROL DETAILS
SHEET 4 ENVIRONMENTAL STUDY

LOT NUMBER	STREET ADDRESS
5,6,7A & 7B	5851 BANNER ROAD

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA TOWN CENTER	3/2	REMAINING PARCELS 5, 6, 7A & 7B
PLAT NO. 463/196 BLOCK NO.	ZONE	TAX MAP NO.
P.B. 15 F.85	N.T.	36
P.B. 30 F.17		5TH ELECTION DISTRICT
WATER CODE	SEWER CODE	CENSUS TRACT
N/A	N/A	6056

CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO. • (301) 621-8100 • WASH.

DESIGNED: MJP, KWM
DRAWN: CADD
CHECKED: WNT, JLS
DATE: SEPT. 1992

SCALE: 1"=30'
DRAWING: 10 of 4
JOB NO.: 92-133
FILE NO.: 92-133-9E

SITE DEVELOPMENT AND
SEDIMENT AND EROSION CONTROL PLAN
FOR ROUGH GRADING, DEMOLITION AND
DRIVEWAY ENTRANCE TO PUMPING STATION
PARCELS 5, 6, 7A, 7B AND RESIDUE PARCEL
COLUMBIA TOWN CENTER
SECTION 3 AREA 2
TAXMAP NO. 36 TAX PARCEL NO. 304
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

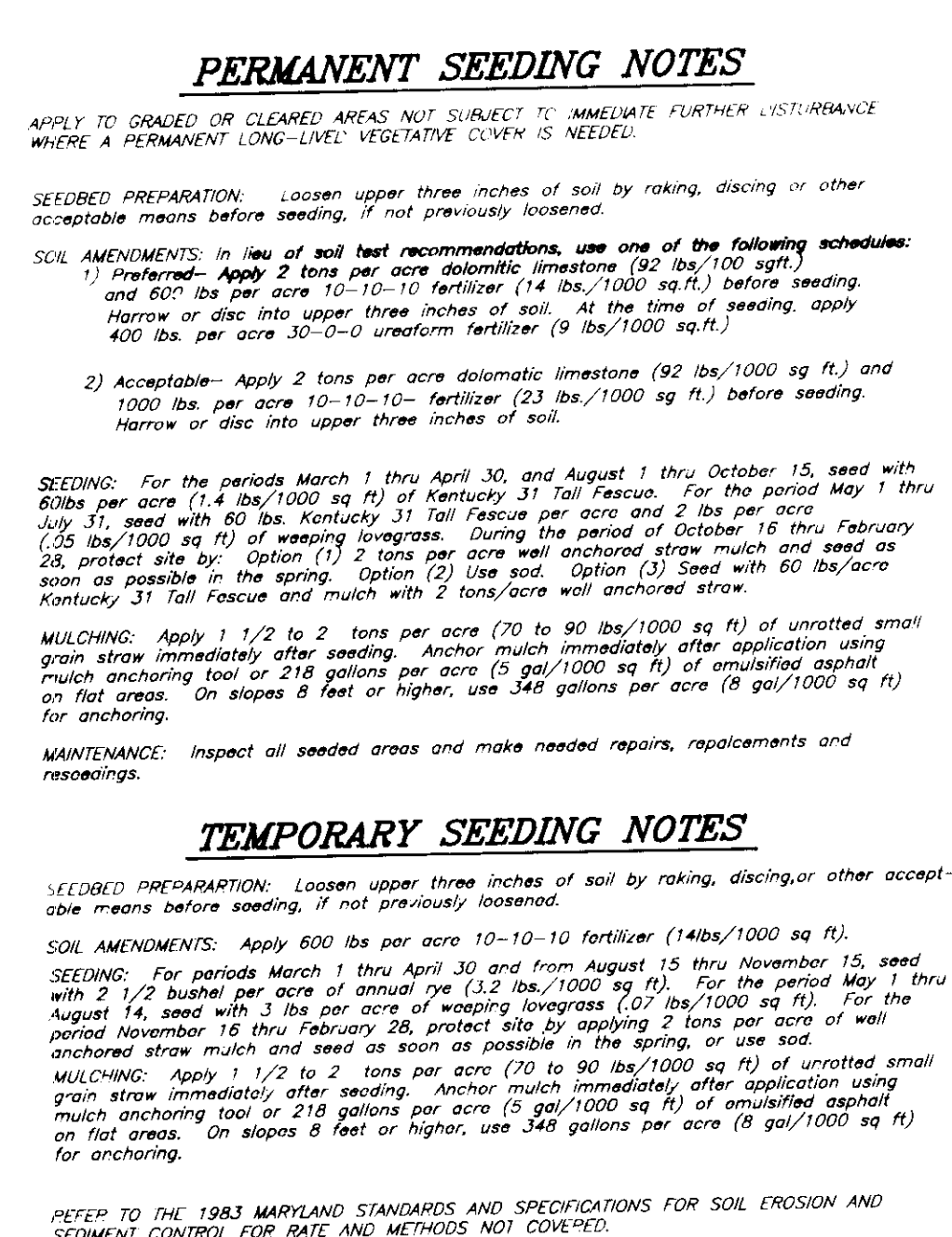
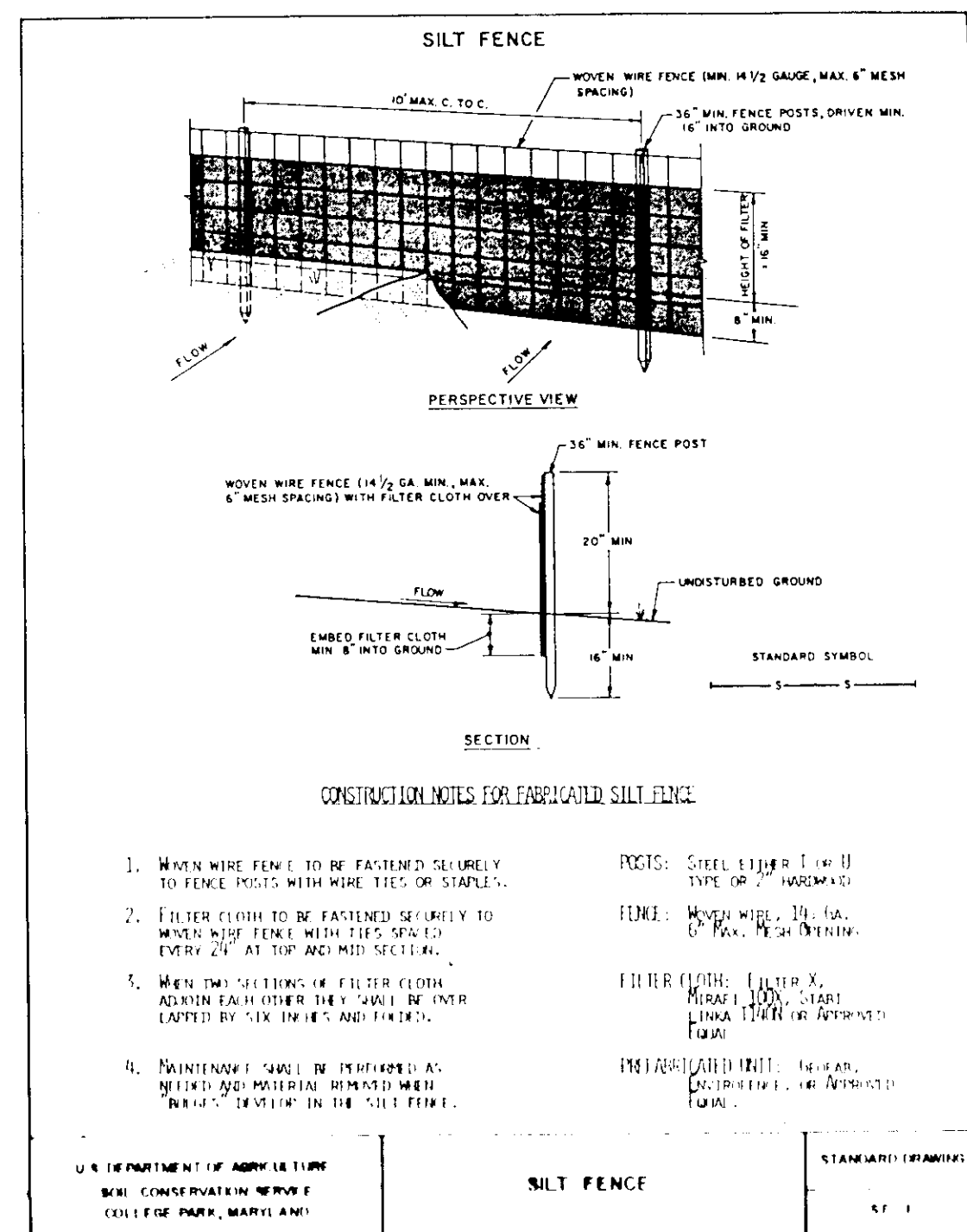
FOR: THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

OWNER / DEVELOPER:
HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 Little Patuxent Parkway
Columbia, MD. 21044

ABANDON 1 1/2" WHC AT CORPORATION STOP
AT 8" WATER MAIN. REMOVE EX. WATER
METER FRAME COVER AND RETURN TO
BUREAU OF UTILITIES. FILL AREA WITH
SELECTED BACKFILL & COMPACT IN ACCORDANCE
WITH STD.S. & SPECS.

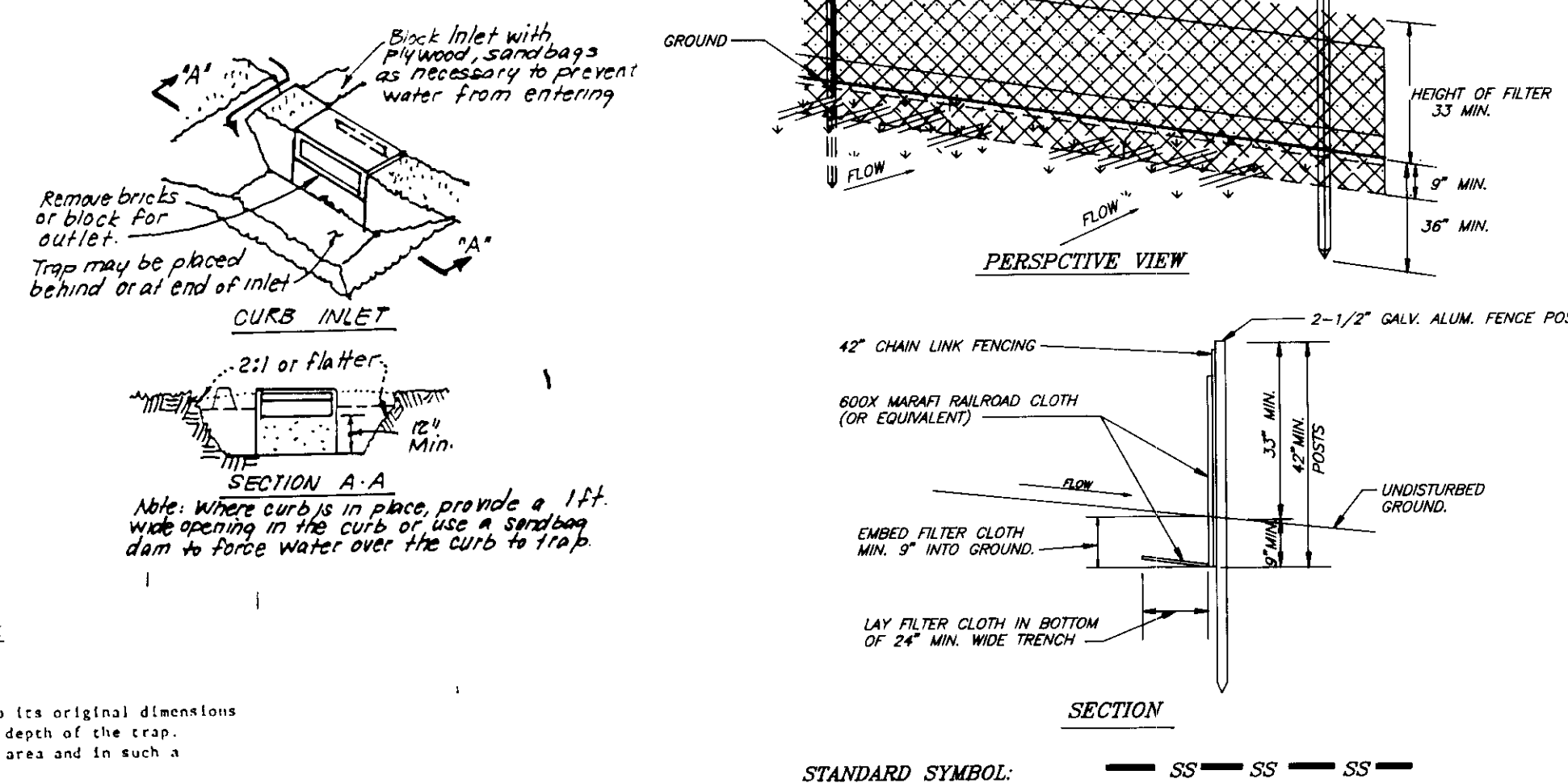
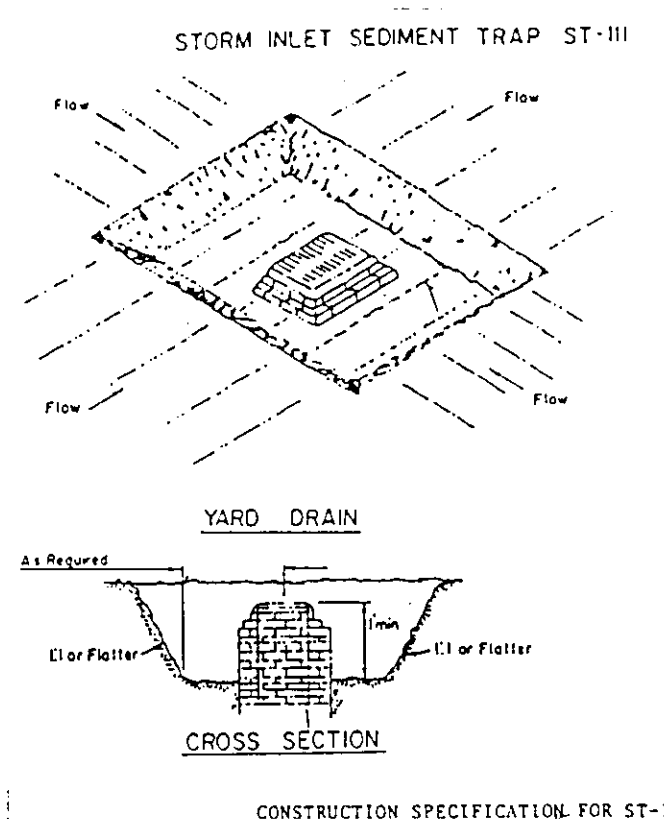
DATE: 11-23-92
SLS

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: [Signature] DATE: 1-29-93
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR: [Signature] DATE: 2/5/93
CHIEF DIVISION OF COMMUNITY PLANNING
AND LAND DEVELOPMENT: [Signature] DATE: 2/4/93
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: [Signature] DATE: 1-21-93
CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 1-21-93



1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (1992-2437)
2. All vegetation and erosion control practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within a) 2 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted according to the provisions in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for perimeter seeding (Sec.50.1) and (Sec.54), temporary seeding (Sec.50.2) and mulching (Sec.52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in accordance with the permit conditions for their removal has been obtained from the Howard County Sediment Control Inspector.
7. SITE ANALYSIS:

Total Area of Site:	8.666 Ac
Area Disturbed:	6.00 Ac
Area to be rooted or paved:	5.394 Ac
Area to be vegetatively stabilized:	7.710 Ac
Total Fill:	19585 CY
8. Offsets Water/Borrow Area Location:
9. Any sediment control practice which is disturbed by grading or necessary for placement of utilities must be repaired on the same day of disturbance.
10. Additional sediment control must be provided, if deemed necessary for the project.
11. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of initiation of perimeter stabilization and sediment control, and before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
12. ~~If a project is to be constructed on an "as-built" basis, at least one sediment control structure shall be installed and maintained throughout the project.~~
12. The total amount of silt fence = 700 L.F.



<u>CONSTRUCTION SEQUENCE:</u>		<u>NO. OF DAYS</u>
1.	Obtain Grading Permit.	7
2.	Install Tree Protection Fence.	7
3.	Cap off utilities. (See plan view). Remove paving, curb and gutter, fences, and conc. slabs as required to install traps 1 and 2.	30
	and install temporary earth dike diversion to trap #2.	
4.	Construct driveway and storm drain at existing pumping station. Stabilize immediately in accordance with Stds. & Specs.	30
5.	Install remaining sediment controls and demolish structures, paving, curb & gutter, fences, etc. within the limits of the disturbed area. Abandon utilities and rough grade site. Temporarily stabilize in accordance with the Stds. and Specs.	120
6.	Permanently stabilize all remaining disturbed areas.	14
7.	Upon approval of the sediment and erosion control inspector remove sediment control devices and stabilize.	7

* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Jane M. Nelson 12/8/97
Signature Date
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.


[Signature] 12/1
Approved

DEVELOPER'S/BUILDER'S CERTIFICATE


"I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

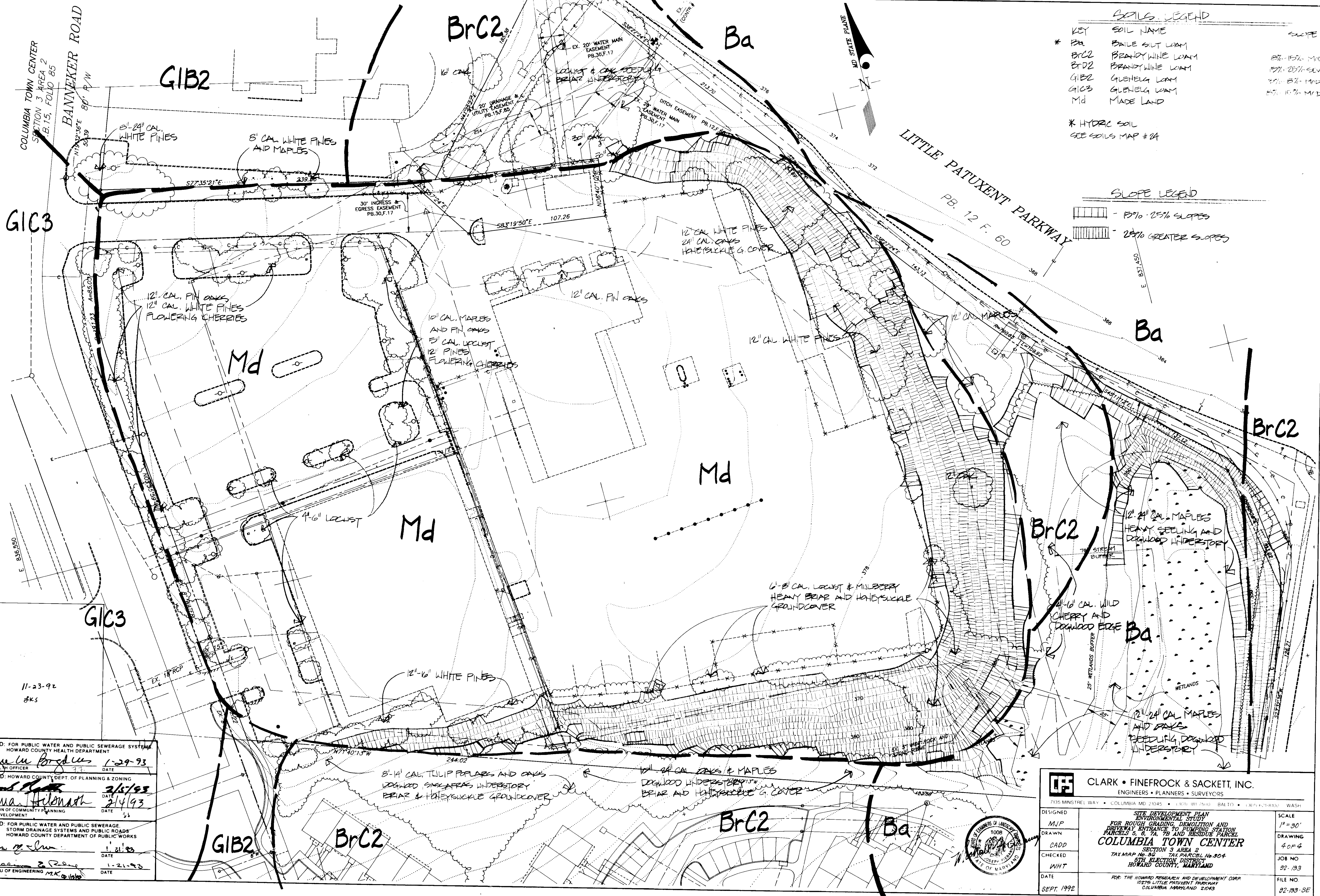
ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

 9-28-92

Signature Date

 CLARK • FINECKROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA MD 21044 • (410) 871-7500 • BALTO • (410) 611-8100 • WASH		
DESIGNED	SITE DEVELOPMENT AND SEDIMENT AND EROSION CONTROL DETAILS FOR ROUGH GRADING, DEMOLITION AND DRIVEWAY EARTHWORK, AND PAVEMENT PARCELS 5, 6, 7A, 7B AND RESIDUE PARCEL COLUMBIA TOWN CENTER	SCALE
KI/WM		As shown
DRAWN		DRAWING
CADD		3 of 4
CHECKED	SECTION 3 AREA 2 TAX MAP No. 36 TAX PARCEL No. 304 CITY OF BALTIMORE HOWARD COUNTY, MARYLAND	JOB NO
JLS		22-133
DATE	FOR THE HOWARD RESEARCH AND DEVELOPMENT CORP. 10275 LITTLE PATENT RD. STEWAY CRYSTOLIA, MARYLAND 21043	FILE NO.
3/PT. 1992		02-133-S



SOILS LEGEND

KEY	SOIL NAME	SCOPE
* Ba	BAILE SILT LOAM	87% - 15% M.D.
BrC2	BRANDYWINE LOAM	17% - 25% S.E.V.
BrD2	BRANDYWINE LOAM	37% - 8% M.D.
GIB2	GLENELE LOAM	57% - 15% M.D.
GIC3	GLENELE LOAM	
Md	MADE LAND	

* HYDRAIC SOIL
SEE SOILS MAP # 24

SLOPE LEGEND

[Hatched Box]	15% - 25% SLOPES
[Hatched Box]	25% GREATER SLOPES

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* 1-29-93
DATE: 1-29-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR: *[Signature]* 2/5/93
DATE: 2/5/93

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE: 2/4/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* 1-21-93
DATE: 1-21-93

CHIEF BUREAU OF ENGINEERING: *[Signature]* 1-21-93
DATE: 1-21-93

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ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (410) 817-2510 • BALTO • (410) 417-8500 • WASH

SITE DEVELOPMENT PLAN
ENVIRONMENTAL STUDY
FOR ROUGH GRADING, DEMOLITION AND
DRIVEWAY ENTRANCE TO PUMPING STATION
PARCELS 5, 6, 7A, 7B AND RESIDUE PARCEL
COLUMBIA TOWN CENTER
SECTION 3 AREA 2
TAX MAP No. 80 TAX PARCEL No. 304
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'
DRAWING: 4 OF 4
JOB NO: 92-193
FILE NO: 92-193-SE

DESIGNED: MJP
DRAWN: CADD
CHECKED: WHT
DATE: SEPT. 1992

FOR THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA MARYLAND 21043